

IN THE CLAIMS

1. (canceled)

2. (currently amended) A method of screening for therapeutic agents useful in the treatment of a cardiovascular disease in a mammal, comprising steps of:

- i) determining the activity of a PDE10A polypeptide at a certain concentration of a test compound or in the absence of said test compound, and
- ii) determining the activity of said polypeptide at a different concentration of said test compound; and
- iii) identifying said test compound as a potential therapeutic agent useful in the treatment of the cardiovascular disease.

3-26. (canceled)

27. (currently amended) A method of screening for therapeutic agents useful in the treatment of a disease selected from the group consisting of ~~peripheral nervous system diseases~~, cancer, gastroenterological diseases; endocrinological diseases; and urological diseases in a mammal, comprising steps of

- i) determining the activity of a PDE10A polypeptide at a certain concentration of a test compound or in the absence of said test compound, and
- ii) determining the activity of said polypeptide at a different concentration of said test compound; and
- iii) identifying said test compound as a potential therapeutic agent useful in the treatment of the disease.

28. (currently amended) A method of screening for therapeutic agents useful in the treatment of ~~a central nervous system disorder selected from the group consisting of brain~~

~~injuries, cerebrovascular diseases and their consequences, motor neuron disease, dementia, ALS, multiple sclerosis, traumatic brain injury, stroke, post-stroke sequelae, posttraumatic brain injury, small vessel cerebrovascular disease, Alzheimer's disease, vascular dementia, dementia with Lewy bodies, frontotemporal dementias, Pick's disease, progressive nuclear palsy, thalamic degeneration, Creutzfeldt Jakob dementia, HIV dementia, schizophrenia with dementia, Korsakoff's psychosis, and pain,~~ comprising steps of

- i) determining the activity of a PDE10A polypeptide at a certain concentration of a test compound or in the absence of said test compound, and
- ii) determining the activity of said polypeptide at a different concentration of said test compound; and
- iii) identifying said test compound as a potential therapeutic agent useful in the treatment of the disease.